

Peak Automation 11414 Cockleburr Road Roanoke, Texas 76262 (214)-215-3751 Fax (682)-237-4700 www.peakautomation.com





## Maximum flexibility - Low cost

The ALM-DL Direct Dock Test Handler is a simple, low cost solution designed for maximum flexibility to allow quick set-up and docking with almost any test platform, and allow almost any parts handling media input/output.

The primary features and benefits are:

**DIRECT DOCKING FLEXIBILITY:** Handler-side docking plates are designed and provided by Peak for almost any test platform. This permits rapid change-over from tester to tester. Peak can also provide adapter plates so that custom and prototype boards can be used on the handler, with or without direct docking.

**EASY ACCESS TO LOAD BOARD**: The open top gantry design allows users direct access to the test load board. This facilitates quick change over of sockets and load boards and easy access to examine the test process. In addition, in many cases the handler does not need to be undocked to change the load board or to use the tester.

**FLEXIBLE INPUT/OUTPUT:** The system design also allows it to be configured for almost any input/output. Typical in/out media include waffle packs, JEDEC trays, film frame mounted bare die, plastic tubes, bulk, tape & reel, and many others.

**FLEXIBLE INTEGRATION OF PROCESSES:** The ALM-DL also can be configured to integrate many different processes. Typical processes are vision inspection, tape & reel packaging, orientation, flipping, custom test fixtures, and thermal processes such as hot and cold testing.

The ALM-DL is the perfect combination of flexibility and low cost.

Call us, or visit our website for more information on the ALM-DL.

## **SPECIFICATIONS**

## Part Input / Output Configurations

#### PART INPUT METHODS

- Vibratory feeder
- > Tube stacker manual or auto-stacked
- Manual placement to pick-up nest
- Conveyor through or lateral to machine.
- Tape & reel
- > Trays / Waffle packs

#### PART OUTPUT METHODS

- Bulk bins Sorted
- Tube stacker manual or auto-stacked
- Conveyor through or lateral to machine.
- > Tape & reel
- > Trays / Waffle pack

## Processes Available for Integration

- Electrical testing Cable or Board dock
- Laser marking
- Ink marking

- Packaging
- Media Transfer
- Hot/Cold Testing

## Manipulator Specifications

- ➤ Gantry travel 30" up to 72"
- Accuracy: Sub-micron resolution
- Maximum Linear Speed 200"/s
- Maximum Acceleration 5 g (49m/s 2)

End Effectors / Grippers will be provided that match the part to be processed in the machine. Multi-part end effectors can be used to duplicate walking beam motion and improve throughout.

#### Controls

- > PLC controller. Extra I/O available
- Color Graphics Touchscreen or PC flatscreen.
- Full featured MMI: Passwords, graphic counter arrays, pull-down menus, graphics, bit-map images, pass/fail/status indicators, alarm history, diagnostic screen, manual activation screen

The MMI incorporates graphics and pictures for ease of use. It comes with a variety of process modules pre-programmed, which the user can select when changing configurations. The PLC has spare I/O available and can add more if needed to integrate more complicated processes.

## Safety

- Emergency Stop buttons
- Interlocked Lexan safety enclosure

- Light curtain optional
- CE Certification available

#### **Dimensions**

- Width 32" (813mm) up to 92" (2337mm)
- Depth 32" (813mm) up to 50" (1270mm)
- > Height 64" (1626mm) w/ base cabinet
- > Height 75" (1905mm) w/ base / light pole

Dimensions may not include integrated processes.

#### Utilities / Environment

- Power: 220-240 VAC 1-phase, 20 Amp
- CDA/N2: 80-100 psi @ 3 cfm. Internal regulator & SOV provided.
- Clean room certified option.
- The ALM-DL is provided with leveling feet and casters.

# ALM-DL Direct Dock Test Handler

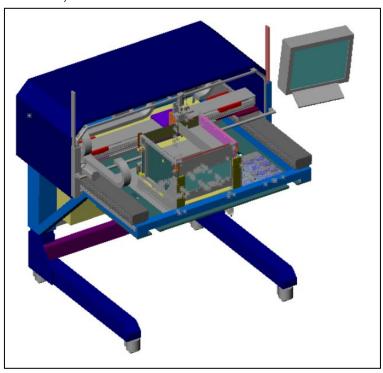
#### **Additional Available Options:**

- > Hot/Cold testing chambers
- Multi-manipulator for improved logistics and UPH.
- Quad / Octal testing
- Vision lead inspect (2D or 3D)
- Multi-handler docking (Work cells / Conveyor lines)

**Device Application Examples:** 

BGA	CPGA	HSOP
PGA	SOP	COB
CQFP	MLF/MLP	PLCC
SOT-xx	CFP	CSP
MCM	SC-xx	TO-xx
DIP	Micro-X	SOIC-xx
Chip cells	TSOP	TSSOP
Capacitors	MSOP	Fuses

ALM-DL – Example: JEDEC tray in-out, Tape & Reel out, hot/cold chamber.



Call us, or visit our website for more information on the ALM-DL

# **Sales Representative:**

